

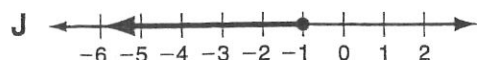
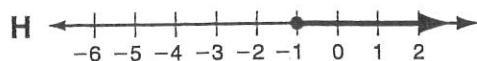
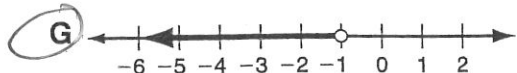
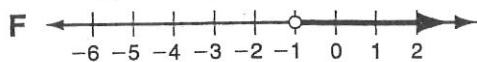
**CHAPTER**
**3**
**Chapter Test**
**Form B**

Select the best answer.

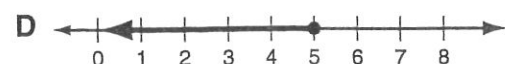
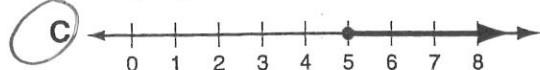
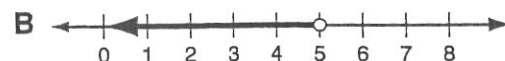
1. Describe the solutions of  $4 \leq n + 2$  in words.

**A** all real numbers greater than 4  
**B** all real numbers greater than or equal to 2  
**C** all real numbers less than 2  
**D** all real numbers less than or equal to 4

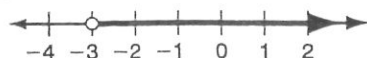
2. Which graph represents  $k < -1$ ?



3. Which graph represents  $b \geq 5$ ?



4. Which inequality is shown by the graph below?



**F**  $x > -3$       **H**  $x < -3$   
**G**  $x \geq -3$       **J**  $x \leq -3$

5. Which inequality represents the situation "no more than 160 students are in the freshmen class"?

**A**  $s > 160$       **C**  $s < 160$   
**B**  $s \geq 160$       **D**  $s \leq 160$

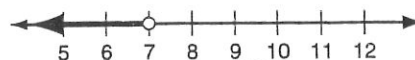
6. Solve  $x + 7 > 2$ .

**F**  $x > -5$       **H**  $x > 5$   
**G**  $x < -5$       **J**  $x < 5$

7. Solve  $m - 1.5 \leq 4$ .

**A**  $m \leq -2.5$       **C**  $m \leq 5.5$   
**B**  $m \geq -2.5$       **D**  $m \geq 5.5$

8. Which inequality has the solutions shown below?



**F**  $p \geq 7$       **H**  $5 > p - 2$   
**G**  $5 < p - 2$       **J**  $p \leq 7$

9. Mike is on a cross-country trip and wants to drive at least 450 miles per day. So far today, he has driven 175 miles. Which inequality can be solved to show the number of miles  $m$  that Mike must drive to meet his daily goal?

**A**  $175 + m < 450$       **C**  $175 + m > 450$   
**B**  $175 + m \leq 450$       **D**  $175 + m \geq 450$

10. Solve  $-28 < 4y$ .

**F**  $y < -7$       **H**  $y < 7$   
**G**  $y > -7$       **J**  $y > 7$

11. Solve  $\frac{d}{2} \geq 8$ .

**A**  $d \geq 4$       **C**  $d \geq 16$   
**B**  $d \leq 4$       **D**  $d \leq 16$

12. Cookies are sold in the lunchroom for \$1.50. Ana wants to buy cookies for a group of her friends. If she has \$20, which inequality can be solved to show the number of cookies  $c$  she can buy?

**F**  $1.50c < 20$       **H**  $1.50c > 20$   
**G**  $1.50c \leq 20$       **J**  $1.50c \geq 20$

13. Solve  $-4(x - 1) < 12$ .

**A**  $x > -2$       **C**  $x > -3$   
**B**  $x < -2$       **D**  $x < -3$

## CHAPTER

**3****Chapter Test****Form B** continued

14. Solve  $2^3 - a > -3(2 - 6)$ .

F  $a < -6$

☒ H  $a < -4$

G  $a > -6$

J  $a > -4$

15. John is considering accepting one of two sales positions. ABC Company offers a yearly salary of \$45,000. XYZ Company offers a yearly salary of \$38,000 plus a 2% annual commission on sales. For what amount of sales  $s$  is the salary at XYZ Company greater than the salary at ABC Company?

A  $s > 7000$

C  $s > 70,000$

B  $s > 35,000$

☒ D  $s > 350,000$

16. Solve  $3(1 + h) \leq 3h + 9$ .

F  $h \leq 1$

☒ H no solutions

G  $h \leq 2$

J all real numbers

17. Solve  $\frac{3}{4}s \geq \frac{1}{4}s + 8$ .

A  $s \geq 4$

C  $s \geq 12$

B  $s \geq 8$

☒ D  $s \geq 16$

18. Jasmine and her sister are saving to buy MP3 players. Jasmine has \$50 and plans to save \$10 per week. Her sister has \$80 and plans to save \$7 per week. In how many weeks will Jasmine have more money saved than her sister?

F 2 weeks

H 10 weeks

G 4 weeks

☒ J 11 weeks

19. Solve the compound inequality

$-2 \leq m + 3 < 13$ .

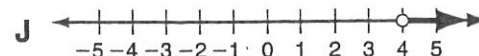
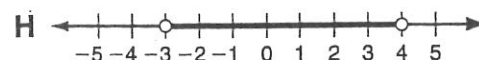
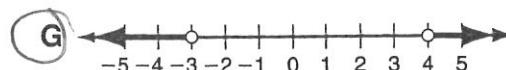
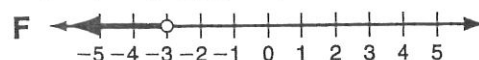
☒ A  $-5 \leq m < 10$

B  $-2 \leq m < 13$

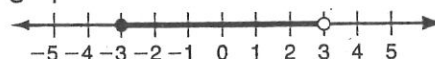
C  $1 \leq m < 16$

D  $6 \leq m < 39$

20. Which graph represents the solutions of  $-1 + r > 3$  OR  $r + 5 < 2$ ?



21. Which compound inequality is shown by the graph below?



A  $x \geq -3$  AND  $x > 3$

☒ B  $x \geq -3$  AND  $x < 3$

C  $x \geq -3$  OR  $x > 3$

D  $x \geq -3$  OR  $x < 3$